



Instant Charge Battery System For Portable Electronic Devices

Abstract

The Instant Charge Battery System For Portable Electronic Devices is an energy storage and delivery device comprising of a capacitor portion for instantaneously capturing electrical energy from an external energy source for the purpose of charging a rechargeable battery, a charge circuit which transfers and regulates a charge current and a charge voltage from the capacitor to the battery, and a chargeable battery. The chargeable battery can be of any chargeable / rechargeable cell(s) such as, but not limited to, NiCad, NiMH or Lithium-ion. Once the Instant Charge Battery System For Portable Electronic Devices is connected to an external electrical energy source, the capacitor portion captures electrical energy within seconds – and then can be immediately disconnected from the external energy source – thereby eliminating the need for an extended period of time a portable electronic device must be connected to an external electrical energy source in order for its chargeable battery to charge.

D. J. Smith, Jr.

U.S. Patent Documents

3288641	Nov. 1966	Rightmire	361/434.
3423642	Jan. 1969	Plehal et al.	361/434.
3538394	Nov. 1970	Bourgault et al.	361/434.
4830938	May 1989	McCullough et al.	429/210.
4900643	Feb. 1990	Eskra et al.	429/210.
5147739	Sep., 1992	Beard	429/194.
5200690	Apr. 1993	Uchida	320/106.
5439756	Aug. 1995	Anani et al.	429/9.
5604426	Feb. 1997	Okamura et al.	323/282.
5871859	Feb. 1999	Parise	429/7.
6057050	May 2000	Parise	429/7.
6326767	Dec. 2001	Small et al.	320/116.
6445936	Sep., 2002	Cannon et al.	455/573.
6476584	Nov. 2002	Sakakibara	320/150.

Foreign Patent Documents

59-14681	Jan. 1984	JP
1-03127	Apr. 1989	JP
1-920226	Jul. 1989	JP
10309002	Nov. 1998	JP
2000253508	Feb. 1999	JP
2000253503	Sep. 2000	JP
2002238108	Aug. 2002	JP
2003206838	Jul. 2003	JP